



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,758	07/28/2003	Didier Martin	033818-007	4423

21839 7590 03/28/2005

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,758

Applicant(s)

MARTIN ET AL.

Examiner

Steven D. Maki

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 072803.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 1733

- 1) The disclosure is objected to because of the following informalities: Page 6 line 10 describes "[will be]".

Appropriate correction is required.

- 2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 3) Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1-9, the location of the upper end of the connecting element is unclear. In claim 1, the description of "these connecting elements extending from a depth H beneath the running surface of the tread when new" indicates that the upper ends of the connecting elements are *below* the running surface. However, the description of "the depth H is zero" in dependent claim 8 indicates that the upper end of the connecting surface may be *at* the running surface.

In claim 3, there is no antecedent basis for "the orifices". In claim 3 line 1, it is suggested to change "the orifices are" to --the at least one orifice includes orifices which are--.

- 4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1733

5) **Claims 1-2, 4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura (US 6220322) in view of Watanabe (US 6315018) or Japan 308 (JP 2-303908).**

Matsuura discloses a pneumatic tire having a tread comprising tread rubber wherein the tread includes blocks ("motifs") defined by circumferential grooves and lateral grooves. Tie bars 7 are located in the outer circumferential grooves such that, as can be seen from figure 1, two blocks 5 are connected by two tie bars 7 (two "connecting elements"). Preferably, the tie bars have a height T_h of 75-100% of the groove depth. See figure 2a and col. 3 lines 7-10. The claimed "cavity" reads on the space defined between the lateral faces of the blocks 5 and the tie bars 7 connecting those blocks 5. Matsuura does not recite at least one orifice passing through the whole of at least one rubber element, which may be the motif instead of the connecting elements.

As to claims 1-2, 4 and 6-9, it would have been obvious to one of ordinary skill in the art to form a sipe having a narrow part at the tread surface and a wide part below the tread surface such that the sipe passes through the whole of a block of Matsuura's tire tread since (1) Watanabe suggests forming a sipe through the whole of a block in a tire tread to improve wet performance and improve drainage after wear to compensate for deterioration of drainage performance of grooves due to their reduced depth after wear (figure 1, 2) or (2) Japan 908 suggests forming a sipe through the whole of a block to improve driving and braking performance on wet road and obtain good drainability (abstract, figures 5-6). With respect to claim 1, the claimed "at least one orifice" reads

Art Unit: 1733

on the wide bottom part of the sipe suggested by either Watanabe or Japan 908. This wide bottom part of the sipe is "practically insensitive" to the compression of rubber since it functions to drain water. The use a sipe having a wide bottom part directly corresponds to applicant's figure 5 embodiment.

As to claim 2, the wide part of the sipe suggested by either Watanabe or Japan 908 is elongated in a direction perpendicular to the tread surface. See figure 2 of Watanabe or figure 6 of Japan 908.

As to claim 4, the claimed orifice would have been obvious in view of (1) Matsuura's teaching to use tie bars having height equal to 75-100% of groove depth (this teaching establishes "depth H") and (2) either Watanabe or Japan 908's teaching as to the size and location of the wide part of the sipe which is used for drainage.

As to claim 6, the claimed channel reads on the wide bottom part of the sipe suggested by either Watanabe or Japan 908.

As to claim 7, the claimed incision reads on the narrow upper part of the sipe suggested by either Watanabe or Japan 908.

As to claim 8, Matsuura teaches that the height of the tie bar may be 100% of the groove depth.

As to claim 9, Matsuura incorporates the tire in a tire. The description of intended use fails to require tire structure different from that disclosed by Matsuura.

Art Unit: 1733

Allowable Subject Matter

6) **Claims 3 and 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.**

Remarks

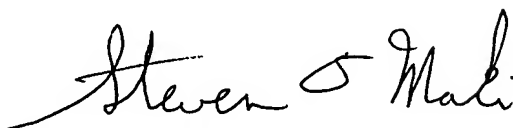
7) The remaining references are of interest.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
March 21, 2005


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
AV 1733
3-21-05